



EN Operating instructions.pages 1 to 2
Original

Technical data

Standards:	IEC 60947-5-1
Enclosure:	glass-fibre reinforced thermoplastic
Operating principle:	magnetic
Protection class:	IP40 to IEC 60529
Ambient temperature:	0°C ... +75°C
Connection type:	
- Base:	2 single wires LiY 0.75 mm ² , 1 m long Sheathed cable LiYY 2 x 0.25 mm ² (spec -1824-3)
- Plug-in switching element	
Mechanical life:	min 10 ⁹ operations
Electrical life:	5 x 10 ⁸ operations depending on load
Bounce duration	max. 0.2 ms
Switching time "Close":	max. 2 ms
Switching time "Open":	max. 0.07 ms
Switching voltage:	max. 60 VAC/DC
Switching current:	max. 1 A
Switching capacity:	max. 30 VA/W
Withstand voltage:	400 VDC
Resistance to vibration:	60 g on sine wave oscillation



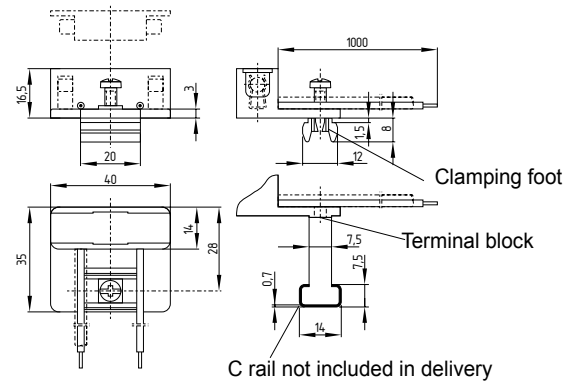
Further technical information can be found in the Schmersal catalogues or in the online catalogue on the Internet: www.schmersal.net.



The currently valid declaration of conformity can be downloaded from the internet at www.schmersal.net.

Mounting

Dimensions (All measurements in mm.)



Product description

Plug-in, latching magnetic reed switch for applications that need to be adjusted at the place of installation. The base is clipped into a C rail. The shock-sensitive switching element is then plugged in on site and the switch adjusted.

The NC or NO function depends on the actuating direction and the polarity of the actuating magnet. The actuators for the magnetic safety sensors must be ordered separately.

Ordering code

This operating instructions manual applies to the following types:

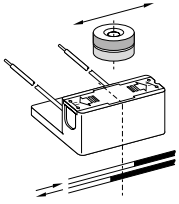
BN 85-①-②

No.	Option	Description
①	R	1 bistable contact
②		Mounting with clamping foot and 2 single wires
	1831-1	Mounting to C profile rails and 2 single wires without screws
	1831-2	As before with screws
	1824-1	Mounting to C profile rails and sheathed cable without screws
	1824-2	As before with screws
	1824-3	Mounting with clamping foot and sheathed cable

- Plug-in reed contact insert, on-site assembly
- Adjustable by releasing the central mounting screw
- Actuating distance up to 40 mm depending on version and actuating magnet

Contact	Type	Actuating magnet	Switching distance (mm)
1 bistable contact	BN 85-R	BP 6S	2...12
		BP 8S	2...10
		BP 10S	5...20
		2 x BP 10S	6...27
		BP 15S	5...22
		2 x BP 15S	7...28
		BP 34S	10...40
		BP 20S	3...28
		BP 31S	4...30
		BP 11S	4...23
		BP 12S	4...27

1 bistable contact BN 85-RZ with S actuating magnet BP 10S

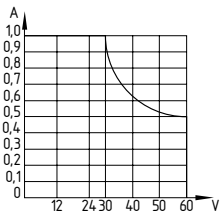


The electrical connection may only be carried out by authorised personnel in a de-energised condition.



The user must observe the country-specific installation standards as well as all prevailing safety regulations and accident prevention rules.

Switching capacity



Disassembly and disposal

Disassembly

The switch must be disassembled in a de-energised condition only.

Disposal

The switch must be disposed of in an appropriate manner in accordance with the national prescriptions and legislations.

K.A. Schmersal GmbH & Co. KG
Mödinghofe 30, D - 42279 Wuppertal
Postfach 24 02 63, D - 42232 Wuppertal

Phone: +49 - (0)2 02 - 64 74 - 0
Telefax: +49 - (0)2 02 - 64 74 - 1 00
E-Mail: info@schmersal.com
Internet: <http://www.schmersal.com>